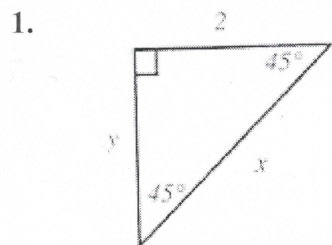
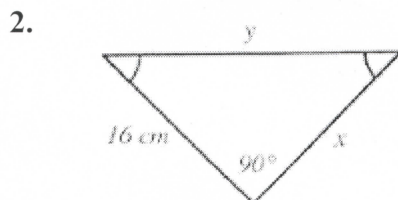


For #1 - 8, given one leg of the 45-45-90 triangle, find the other leg and the hypotenuse.



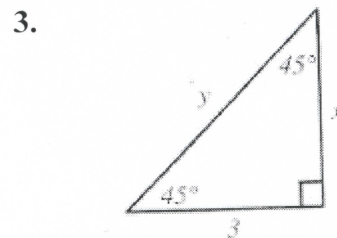
$x = 2\sqrt{2}$

$y = 2$



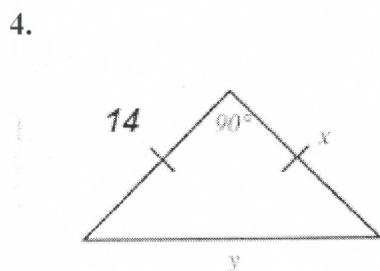
$x = 16 \text{ cm}$

$y = 16\sqrt{2} \text{ cm}$



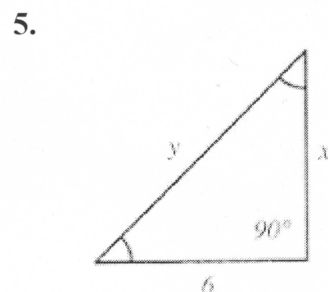
$x = 3$

$y = 3\sqrt{2}$



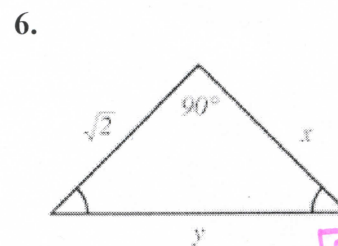
$x = 14$

$y = 14\sqrt{2}$



$x = 6$

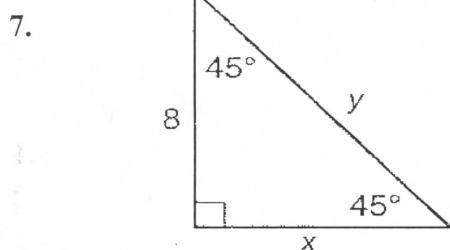
$y = 6\sqrt{2}$



$x = \sqrt{2}$

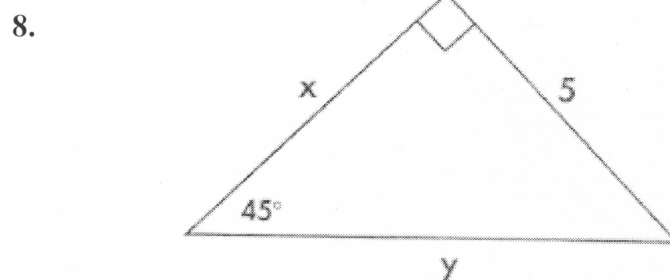
$y = 2$

$\sqrt{2} \cdot \sqrt{2} = \sqrt{4} = 2$



$x = 8$

$y = 8\sqrt{2}$

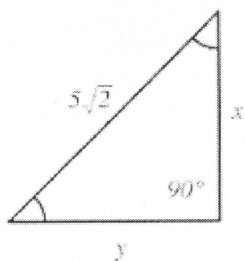


$x = 5$

$y = 5\sqrt{2}$

For #9 - 13, given the hypotenuse of the 45-45-90 triangle, find the legs.

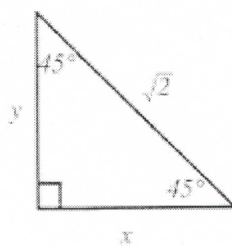
9.



$x = 5$

$y = 5$

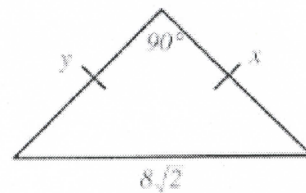
10.



$x = 1$

$y = 1$

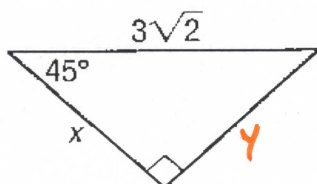
11.



$x = 8$

$y = 8$

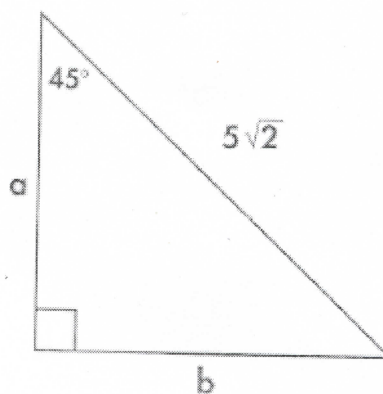
12.



$x = 3$

$y = 3$

13.

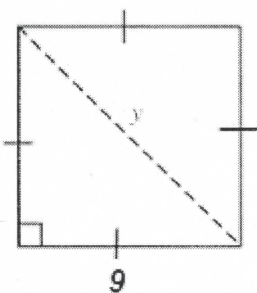


$a = 5$

$b = 5$

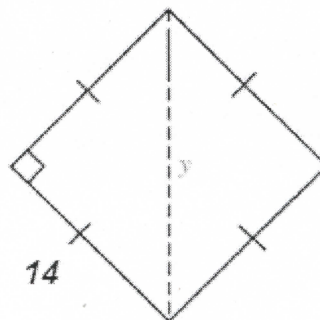
For #14 & 15, find the length of the diagonal of the square.

14.



$y = 9\sqrt{2}$

15.



$y = 14\sqrt{2}$